

WHAT IS CLAIMED IS:

1. A ceramic metal halide lamp comprising:
an envelope;
5 an elongated interior chamber disposed within
the envelope having a lamp body located therein;
at least one electrode lead partially housed by
the interior chamber; and
a single continuous elongated mandrel forming a
10 shaft of the electrode lead.

2. A lamp according to claim 1, wherein the
interior chamber has first and second legs extending
15 therefrom for receiving a first and second lead,
respectively.

3. A lamp according to claim 1, wherein the
electrode lead includes an electrode tip coil operatively
20 associated with one end of the mandrel.

4. A lamp according to claim 3, wherein the
electrode tip coil is formed from tungsten.

5. A lamp according to claim 1, wherein the
electrode lead includes an overwind component operatively
associated with the mandrel at a predetermined position.

6. A lamp according to claim 5, wherein the
30 overwind component is formed from molybdenum.

7. A lamp according to claim 1, wherein the mandrel
is formed from a single piece of tungsten wire.

8. A lamp according to claim 1, wherein the
35 electrode lead includes an electrode tip coil disposed at

one end of the mandrel and an overwind component received over the other end of the mandrel, the outside diameter of the overwind component being greater than the outside diameter of the electrode tip coil.

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9. A ceramic metal halide lamp comprising:
an envelope;
an interior chamber disposed within the envelope; and
10 at least one electrode lead partially housed by the interior chamber having:
a single continuous elongated mandrel;
an electrode tip coil operatively associated with one end of the mandrel; and
15 an overwind component operatively associated with the mandrel at a predetermined position.

10. A lamp according to claim 9, wherein the
20 electrode tip coil is formed from tungsten.

11. A lamp according to claim 9, wherein the overwind component is formed from molybdenum.

25 12. A lamp according to claim 9, wherein the mandrel is formed from a single piece of tungsten wire.

13. A lamp according to claim 9, wherein the
30 outside diameter of the overwind component is greater than the outside diameter of the electrode tip coil.

14. A method for improving the strength and stability of electrode leadwires in ceramic metal halide lamps comprising the steps of:
35 mounting a single continuous elongated mandrel within an inner chamber of a lamp envelope;

attaching an electrode tip coil to an end of the mandrel; and

interconnecting an overwind component with the mandrel at a predetermined position.

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15. The method according to claim 14, wherein the step of attaching an electrode tip coil to an end of the mandrel includes winding a coil around the end of the mandrel.

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16. The method according to claim 14, wherein the step of interconnecting an overwind component with the mandrel comprises winding a wire around the mandrel at a predetermined position.

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17. The method of claim 14 wherein the attaching step includes providing a first material to form the coil and the interconnecting step includes providing a second, dissimilar material to form the overwind component.

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18. The method of claim 14 wherein the attaching step and the interconnecting step use materials having the same diameter.